REMARKS

This amendment is submitted along with a Request for Continued Examination, a request for two months extension and appropriate fee in reply to the Office Action dated October 18, 2006. Claims 1, 6, 8, 9, 17-19 and 21-24 currently stand rejected. Applicant has amended independent claims 1, 21 and 22 to incorporate the subject matter of claim 6, which Applicant believes to be patentably distinct over the cited references for reasons described below. Accordingly, Applicant has canceled claim 6, without prejudice. Claim 19 has been amended to correct its dependency in light of the cancellation of claim 6. No new matter has been added by the amendment.

In light of the amendment and the remarks presented below, Applicant respectfully requests reconsideration and allowance of all now-pending claims of the present application.

Claim Rejections - 35 USC §112

Claims 1 and 9 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Office Action asserts that the trademark Bluetooth is used to identify/describe a type of wireless device and, accordingly, the identification/description is indefinite.

Applicant respectfully traverses this rejection for the same reasons provided in Applicant's prior response. However, Applicant is appreciative of the Examiner's indication that such rejection could be withdrawn in response to the submission of supporting documentation for defining Bluetooth at the time of filing of Applicant's invention. Accordingly, in an effort to further prosecution of the present application, Applicant has attached herewith supporting documentation for defining Bluetooth at the time of filing of Applicant's invention. In this regard, Applicant submits herewith a copy of a portion of the Specification of the Bluetooth System as of December of 1999. Applicant respectfully submits that, as evidenced, for example, at pages 18-19 of the Bluetooth Specification attached herewith, Bluetooth may be defined as an open radio-frequency standard that enables cable-free voice and data communication between devices through short-range two-way radio in the ISM frequency band of about 2.4 gigahertz.

As such, Applicant respectfully submits that the rejections of claims 1 and 9 under 35 U.S.C. §112, second paragraph, are overcome.

Claim Rejections - 35 USC §102

Claims 6, 8, 17-19 and 21-23 stand rejected under 35 U.S.C. §102(e) as being anticipated by Rallis et al. (U.S. Patent No. 6,189,099, hereinafter "Rallis"). As stated above, claim 6 has been canceled, without prejudice, due to its incorporation into independent claims. Thus, the rejection of claim 6 is now moot.

Applicant respectfully notes that independent claim 22, as amended, recites that a secret key is used for encrypting a hardware identification sequence and a public key is used for decrypting the hardware identification sequence. The public key is encrypted additionally using a public key encryption method which includes a second secret key which is only known to a trusted third authority, and a second public key corresponding to said second secret key. The second secret key is used for encrypting the public key and the second public key is used for decrypting the encrypted public key. In other words, the claimed invention is directed to a two-stage encryption procedure that allows a second authority to exercise control over the software protection process. Thus, for example, the developer of software may be enabled to bind his software to a specific device, which may, for instance, be connected wirelessly to a mobile phone (e.g., via a Bluetooth interface). The specific device may be identified by its hardware identification address (e.g., Bluetooth address). A second authority such as the manufacturer may additionally be involved in that the public key provided by the software developer/distributor is encrypted by the secret key of the manufacturer. Hence, a user of the software requires both the encrypted key of the software developer/distributor and the public key of the manufacturer.

The public key of the manufacturer may be first applied to obtain the decrypted public key of the software developer/distributor, which may then be applied for decrypting the encrypted hardware identification address provided in the license key. Accordingly the hardware identification address in the license key has been encrypted by the secret key of the manufacturer. The fact that the public key of the manufacturer is required in the process indicates to the user of

the software, for example, that the software is known to the manufacturer of the mobile phone and therefore may meet, for example, quality standards of the manufacturer or the like.

Rallis is directed to a notebook security system known as a "dongle", which is used in the field of software protection. Rallis describes a key device, which stores a key device serial number and an encryption key (cf. col. 3, lines 1-3). The key device serial number and the encryption key are read out from the key device. The encryption key is then used to decrypt an encrypted portion of a validation record, which is, for example, provided with the software to be protected. The validation record is identified out of a plurality of validation records by the key device serial number included therein as plain text. The encrypted portion of the validation record includes an internal device serial number, which is compared with the serial number of the internal device of the computer system executing the software. For example, a hard disk serial number may be used as an internal device serial number. If the internal device serial number of the validation record and the read-out serial number of the internal device match, software execution is enabled (cf. col. 3, lines 33-35 and 47-57). Thus, contrary to the recitations of the claimed invention, Rallis merely discloses the use of one encryption key for decrypting contents of the encrypted portion of the validation record (cf. col. 3, lines 41-46) and fails to teach or suggest the features of the claimed invention recited above which correspond to the two-stage encryption procedure defined in independent claim 22.

Independent claim 21 has been amended to similarly incorporate the two-stage encryption procedure defined in independent claim 22. Accordingly, independent claim 21 is patentable and non-obvious in view of Rallis for at least the same reasons given above for independent claim 22. Claims 8, 17-19 and 23 depend directly from either independent claim 22 or independent claim 21, respectively, and thus include all the recitations of their respective independent claims. Accordingly, dependent claims 8, 17-19 and 23 are patentable for at least the same reasons given above for independent claims 21 and 22.

For all the reasons stated above, Applicant respectfully submits that the rejections of claims 8, 17-19 and 21-23 are overcome.

Claim Rejections - 35 USC §103

Claims 1, 9 and 24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rallis in view of Vainio ("Bluetooth Security", hereinafter "Vainio").

As stated above, Rallis fails to teach or suggest the features of the claimed invention recited above which correspond to the two-stage encryption procedure defined in independent claims 21 and 22. Vainio similarly fails to teach or suggest these features of independent claims 21 and 22 and is not cited as such. Thus, since neither Rallis nor Vainio teaches or suggests the above recited features of independent claims 21 and 22, independent claims 21 and 22 are patentable over Rallis and Vainio either alone or in combination. Independent claim 1 has also been amended to incorporate the two-stage encryption procedure defined in independent claims 21 and 22 and is therefore patentable for at least the same reasons given above for independent claims 21 and 22. Claims 9 and 24 depend indirectly from independent claims 22 and 21, respectively, and therefore include all the recitations of their respective independent claims. Accordingly, dependent claims 9 and 24 are patentable for at least the same reasons given above for independent claims 21 and 22.

For all the reasons stated above, Applicant respectfully submits that the rejections of claims 1, 9 and 24 are overcome.

CONCLUSION

In view of the amendment, and the remarks submitted above, it is respectfully submitted that the present claims are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicant's undersigned attorney to resolve any remaining issues in order to expedite examination of the present invention.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

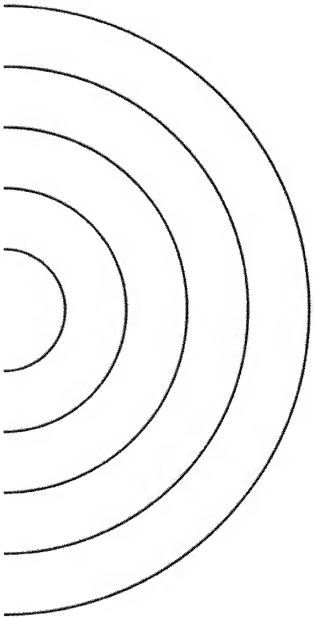
Respectfully submitted,

Chad L. Thorson
Registration No. 55,675

Customer No. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111

ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON MARCH 16, 2007.
LEGAL02/30271382v1

Specification of the Bluetooth System



Wireless connections made easy

Core

Bluetooth™

v1.0 B
December 1st 1999

Bluetooth.

Specification of the Bluetooth System

Version 1.0 B

Bluetooth.

Revision History

The Revision History is shown in Appendix I on page 868

Contributors

The persons who contributed to this specification are listed in Appendix II on page 879.

Web Site

This specification can also be found on the Bluetooth website:
http://www.bluetooth.com

Disclaimer and copyright notice

Bluetooth.

MASTER TABLE OF CONTENTS

For the Bluetooth Profiles, *See Volume 2.*

Bluetooth.

Part C **Volume 1 (1:2)**

LINK MANAGER PROTOCOL

Part D **Volume 1 (1:2)**

LOGICAL LINK CONTROL AND ADAPTATION PROTOCOL SPECIFICATION

Bluetooth.

Part E **Volume 1 (1:2)**

SERVICE DISCOVERY PROTOCOL (SDP)

Part F:1 **Volume 1 (1:2)**

RFCOMM WITH TS 07.10

Part F:2 **Volume 1 (1:2)**

IrDA INTEROPERABILITY

Bluetooth.

Part F:3 **Volume 1 (1:2)**

TELEPHONY CONTROL PROTOCOL SPECIFICATION

Part F:4 **Volume 1 (1:2)**

INTEROPERABILITY REQUIREMENTS FOR BLUETOOTH AS A WAP BEARER

Bluetooth.

Part H:1 **Volume 1 (2:2)**

HOST CONTROLLER INTERFACE FUNCTIONAL SPECIFICATION

Part H:2 **Volume 1 (2:2)**

HCI USB TRANSPORT LAYER

Part H:3 **Volume 1 (2:2)**

HCI RS232 TRANSPORT LAYER

Bluetooth.

Part H:4 **Volume 1 (2:2)**

HCI UART TRANSPORT LAYER

Part I:1 **Volume 1 (2:2)**

BLUETOOTH TEST MODE

Part I:2 **Volume 1 (2:2)**

BLUETOOTH COMPLIANCE REQUIREMENTS

Bluetooth.

Part I:3 **Volume 1 (2:2)**

TEST CONTROL INTERFACE

Part K **Profiles - see Volume 2**

Appendix I **Volume 1 (2:2)**

Appendix II **Volume 1 (2:2)**

Appendix III **Volume 1 (2:2)**

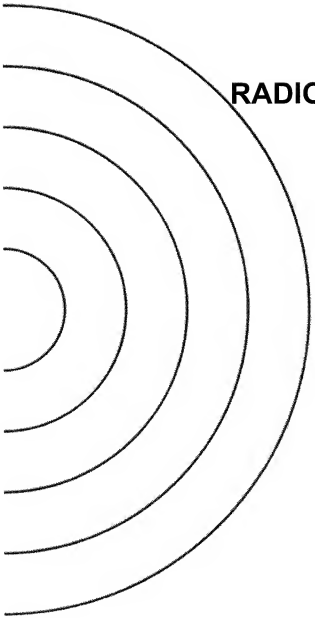
Appendix IV **Volume 1 (2:2)**

SAMPLE DATA

Bluetooth.

MESSAGE SEQUENCE CHARTS

Part A



RADIO SPECIFICATION

CONTENTS

1 SCOPE

The Bluetooth transceiver is operating in the 2.4 GHz ISM band. This specification defines the requirements for a Bluetooth transceiver operating in this unlicensed band.

Requirements are defined for two reasons:

- Provide compatibility between the radios used in the system
- Define the quality of the system

The Bluetooth transceiver shall fulfil the stated requirements under the operating conditions specified in Appendix A and Appendix B. The Radio parameters must be measured according to the methods described in the RF Test Specification.

This specification is based on the established regulations for Europe, Japan and North America. The standard documents listed below are only for information, and are subject to change or revision at any time.

Europe (except France and Spain):

Approval Standards: European Telecommunications Standards Institute, ETSI
Documents: ETS 300-328, ETS 300-826
Approval Authority: National Type Approval Authorities

France:

Approval Standards: La Reglementation en France por les Equipements fonctionnant dans la bande de frequences 2.4 GHz "RLAN-Radio Local Area Network"
Documents: SP/DGPT/ATAS/23, ETS 300-328, ETS 300-826
Approval Authority: Direction Generale des Postes et Telecommunications
Note: A new R&TTE EU Directive will be in effect by March 2000, with consequent effects on the manufacturer's declaration of conformity and free circulation of products within the EU.

Spain:

Approval Standards: Supplemento Del Numero 164 Del Boletin Oficial Del Estado (Published 10 July 91, Revised 25 June 93)
Documents: ETS 300-328, ETS 300-826
Approval Authority: Cuadro Nacional De Atribucion De Frecuesias

Japan:

Approval Standards: Association of Radio Industries and Businesses, ARIB
Documents: RCR STD-33A
Approval Authority: Ministry of Post and Telecommunications, MPT
Note: The Japanese rules are in revision. Decisions on the revision will take place in Q2 1999.

North Americas:

Approval Standards: Federal Communications Commission, FCC, USA
Documents: CFR47, Part 15, Sections 15.205, 15.209, 15.247

Approval Standards: Industry Canada, IC, Canada
Documents: GL36

Approval Authority: FCC (USA), Industry Canada (Canada)

2 FREQUENCY BANDS AND CHANNEL ARRANGEMENT

The Bluetooth system is operating in the 2.4 GHz ISM (Industrial Scientific Medicine) band. In a vast majority of countries around the world the range of this frequency band is 2400 - 2483.5 MHz. Some countries have however national limitations in the frequency range. In order to comply with these national limitations, special frequency hopping algorithms have been specified for these countries. It should be noted that products implementing the reduced frequency band will not work with products implementing the full band. The products implementing the reduced frequency band must therefore be considered as local versions for a single market. The Bluetooth SIG has launched a campaign to overcome these difficulties and reach total harmonization of the frequency band.

Geography	Regulatory Range	RF Channels
USA, Europe and most other countries[1)]	2.400-2.4835 GHz	f=2402+k MHz, k=0,...,78
Spain[2)]	2.445-2.475 GHz	f=2449+k MHz, k=0,...,22
France[3)]	2.4465-2.4835 GHz	f=2454+k MHz, k=0,...,22

Table 2.1: Operating frequency bands

Note 1. Japan, the MPT announced at the beginning of October 1999 that the Japanese frequency band would be extended to 2400-2483.5 MHz, effective immediately. Testing of devices by TELEC may however need some time to change. The previously specified special frequency-hopping algorithm covering 2471-2497 MHz remains as an option.

Note 2. There is a proposal in Spain to extend the national frequency band to 2403-2483.5 MHz. The Bluetooth SIG has approached the authorities in Spain to get a full harmonization. The outcome is expected by the beginning of year 2000.

Note 3. The Bluetooth SIG has established good contacts with the French authorities and are closely following the development of harmonization.

Channel spacing is 1 MHz. In order to comply with out-of-band regulations in each country, a guard band is used at the lower and upper band edge.

Geography	Lower Guard Band	Upper Guard Band
USA	2 MHz	3.5 MHz
Europe (except Spain and France)	2 MHz	3.5 MHz
Spain	4 MHz	26 MHz
France	7.5 MHz	7.5 MHz
Japan	2 MHz	2 MHz

Table 2.2: Guard Bands

3 TRANSMITTER CHARACTERISTICS

The requirements stated in this section are given as power levels at the antenna connector of the equipment. If the equipment does not have a connector, a reference antenna with 0 dBi gain is assumed.

Due to difficulty in measurement accuracy in radiated measurements, it is preferred that systems with an integral antenna provide a temporary antenna connector during type approval.

If transmitting antennas of directional gain greater than 0 dBi are used, the applicable paragraphs in ETSI 300 328 and FCC part 15 must be compensated for.

The equipment is classified into three power classes.

Power Class	Maximum Output Power (Pmax)	Nominal Output Power	Minimum Output Power[1)]	Power Control
1	100 mW (20 dBm)	N/A	1 mW (0 dBm)	Pmin<+4 dBm to Pmax Optional: Pmin[2)] to Pmax
2	2.5 mW (4 dBm)	1 mW (0 dBm)	0.25 mW (-6 dBm)	Optional: Pmin[2)] to Pmax
3	1 mW (0 dBm)	N/A	N/A	Optional: Pmin[2)] to Pmax

Table 3.1: Power classes

Note 1. Minimum output power at maximum power setting.

Note 2. The lower power limit Pmin<-30dBm is suggested but is not mandatory, and may be chosen according to application needs.

A power control is required for power class 1 equipment. The power control is used for limiting the transmitted power over 0 dBm. Power control capability under 0 dBm is optional and could be used for optimizing the power consumption and overall interference level. The power steps shall form a monotonic sequence, with a maximum step size of 8 dB and a minimum step size of 2 dB. A class 1 equipment with a maximum transmit power of +20 must be able to control its transmit power down to 4 dBm or less.

Equipment with power control capability optimizes the output power in a link with LMP commands (see Link Manager Protocol). It is done by measuring RSSI and report back if the power should be increased or decreased.

3.1 MODULATION CHARACTERISTICS

The Modulation is GFSK (Gaussian Frequency Shift Keying) with a BT=0.5. The Modulation index must be between 0.28 and 0.35. A binary one is represented by a positive frequency deviation, and a binary zero is represented by a negative frequency deviation. The symbol timing shall be better than ±20 ppm.

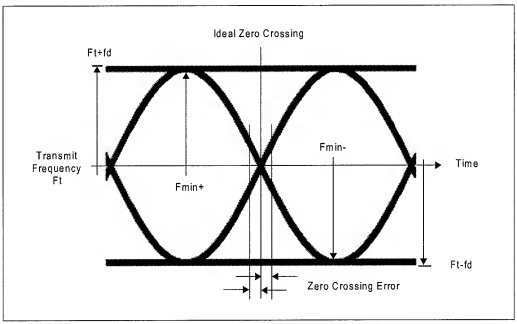


Figure 3.1: Figure 3-1 Actual transmit modulation.

For each transmit channel, the minimum frequency deviation (Fmin = the lesser of {Fmin+, Fmin-}) which corresponds to 1010 sequence shall be no smaller than ±80% of the frequency deviation (fd) which corresponds to a 00001111 sequence.
In addition, the minimum deviation shall never be smaller than 115 kHz.

The zero crossing error is the time difference between the ideal symbol period and the measured crossing time. This shall be less than ± 1/8 of a symbol period.

3.2 SPURIOUS EMISSIONS

The spurious emission, in-band and out-of-band, is measured with a frequency hopping transmitter hopping on a single frequency; this means that the synthesizer must change frequency between receive slot and transmit slot, but always returns to the same transmit frequency.

For the USA, FCC parts 15.247, 15.249, 15.205 and 15.209 are applicable regulations. For Japan, RCR STD-33 applies and, for Europe, ETSI 300 328.

3.2.1 In-band Spurious Emission

Within the ISM band the transmitter shall pass a spectrum mask, given in Table 3.2. The spectrum must comply with the FCC's 20-dB bandwidth definition stated below, and should be measured accordingly. In addition to the FCC requirement an adjacent channel power on adjacent channels with a difference in channel number of two or greater an adjacent channel power is defined. This adjacent channel power is defined as the sum of the measured power in a 1 MHz channel. The transmitted power shall be measured in a 100 kHz bandwidth using maximum hold. The transmitter is transmitting on channel M and the adjacent channel power is measured on channel number N. The transmitter is sending a pseudo random data pattern throughout the test.

Frequency offset	Transmit Power
± 550 kHz	-20 dBc
|M-N| = 2	-20 dBm
|M-N| ≥ 3	-40 dBm

Table 3.2: Transmit Spectrum mask.

Note: If the output power is less than 0dBm then, wherever appropriate, the FCC's 20 dB relative requirement overrules the absolute adjacent channel power requirement stated in the above table.

"In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c))."

FCC Part 15.247c

Exceptions are allowed in up to three bands of 1 MHz width centered on a frequency which is an integer multiple of 1 MHz. They must, however, comply with an absolute value of –20 dBm.

3.2.2 Out-of-Band Spurious Emission

The measured power should be measured in a 100 kHz bandwidth.

Frequency Band	Operation mode	Idle mode
30 MHz - 1 GHz	-36 dBm	-57 dBm
1 GHz – 12.75 GHz	-30 dBm	-47 dBm
1.8 GHz – 1.9 GHz	-47 dBm	-47 dBm
5.15 GHz – 5.3 GHz	-47 dBm	-47 dBm

Table 3.3: Out-of-band spurious emission requirement

3.3 RADIO FREQUENCY TOLERANCE

The transmitted initial center frequency accuracy must be ±75 kHz from F_c.

The initial frequency accuracy is defined as being the frequency accuracy before any information is transmitted. Note that the frequency drift requirement is not included in the ±75 kHz.

The transmitter center frequency drift in a packet is specified in Table 3.4. The different packets are defined in the Baseband Specification.

Type of Packet	Frequency Drift
One-slot packet	±25 kHz
Three-slot packet	±40 kHz
Five-slot packet	±40 kHz
Maximum drift rate[1)]	400 Hz/µs

Table 3.4: Frequency drift in a package

Note 1. The maximum drift rate is allowed anywhere in a packet.

4 RECEIVER CHARACTERISTICS

In order to measure the bit error rate performance; the equipment must have a "loop back" facility. The equipment sends back the decoded information. This facility is specified in the Test Mode Specification.

The reference sensitivity level referred to in this chapter equals -70 dBm.

4.1 ACTUAL SENSITIVITY LEVEL

The actual sensitivity level is defined as the input level for which a raw bit error rate (BER) of 0.1% is met. The requirement for a Bluetooth receiver is an actual sensitivity level of –70 dBm or better. The receiver must achieve the –70 dBm sensitivity level with any Bluetooth transmitter compliant to the transmitter specification specified in Section 3 on page 20.

4.2 INTERFERENCE PERFORMANCE

The interference performance on Co-channel and adjacent 1 MHz and 2 MHz are measured with the wanted signal 10 dB over the reference sensitivity level. On all other frequencies the wanted signal shall be 3 dB over the reference sensitivity level. Should the frequency of an interfering signal lie outside of the band 2400-2497 MHz, the out-of-band blocking specification (see Section 4.3 on page 25) shall apply. The interfering signal shall be Bluetooth-modulated (see section 4.8 on page 27). The BER shall be ≤ 0.1%. The signal to interference ratio shall be:

Requirement	Ratio
Co-Channel interference, $C/I_{co\text{-}channel}$	11 dB[1)]
Adjacent (1 MHz) interference, C/I_{1MHz}	0 dB[1]
Adjacent (2 MHz) interference, C/I_{2MHz}	-30 dB
Adjacent (≥3 MHz) interference, $C/I_{\geq 3MHz}$	-40 dB
Image frequency Interference[2) 3)], C/I_{image}	-9 dB[1]
Adjacent (1 MHz) interference to in-band image frequency, $C/I_{image\pm 1MHz}$	-20 dB[1]

Table 4.1: Interference performance

Note 1. These specifications are tentative and will be fixed within 18 months after the release of the Bluetooth specification version 1.0. Implementations have to fulfil the final specification after a 3-years' convergence period starting at the release of the Bluetooth specification version 1.0. During the convergence period, devices need to achieve a co-channel interference resistance of +14 dB, an ACI (@1MHz) resistance of +4 dB, Image frequency interference resistance of –6 dB and an ACI to in-band image frequency resistance of –16 dB.

Note 2. In-band image frequency

Note 3. If the image frequency ≠ n*1 MHz, than the image reference frequency is defined as the closest n*1 MHz frequency.

Note 4. If two adjacent channel specifications from Table 4.1 are applicable to the same channel, the more relaxed specification applies.

These specifications are only to be tested at nominal temperature conditions with a receiver hopping on one frequency, meaning that the synthesizer must change frequency between receive slot and transmit slot, but always return to the same receive frequency.

Frequencies where the requirements are not met are called spurious response frequencies. Five spurious response frequencies are allowed at frequencies with a distance of ≥2 MHz from the wanted signal. On these spurious response frequencies a relaxed interference requirement C/I = -17 dB shall be met.

4.3 OUT-OF-BAND BLOCKING

The Out of band blocking is measured with the wanted signal 3 dB over the reference sensitivity level. The interfering signal shall be a continuous wave signal. The BER shall be ≤ 0.1%. The Out of band blocking shall fulfil the following requirements:

Interfering Signal Frequency	Interfering Signal Power Level
30 MHz - 2000 MHz	-10 dBm
2000 - 2399 MHz	-27 dBm
2498 – 3000 MHz	-27 dBm
3000 MHz – 12.75 GHz	-10 dBm

Table 4.2: Out of Band blocking requirements

24 exceptions are permitted which are dependent upon the given receive channel frequency and are centered at a frequency which is an integer multiple of 1 MHz. At 19 of these spurious response frequencies a relaxed power level -50 dBm of the interferer may used to achieve a BER of 0.1%. At the remaining 5 spurious response frequencies the power level is arbitrary.

4.4 INTERMODULATION CHARACTERISTICS

The reference sensitivity performance, BER = 0.1%, shall be met under the following conditions.

- The wanted signal at frequency f_0 with a power level 6 dB over the reference sensitivity level.
- A static sine wave signal at f_1 with a power level of –39 dBm
- A Bluetooth modulated signal (see Section 4.8 on page 27) at f_2 with a power level of -39 dBm

Such that $f_0=2f_1-f_2$ and $|f_2-f_1|=n*1$ MHz, where n can be 3, 4, or 5. The system must fulfil one of the three alternatives.

4.5 MAXIMUM USABLE LEVEL

The maximum usable input level the receiver shall operate at shall be better than –20 dBm. The BER shall be less or equal to 0,1% at –20* dBm input power.

4.6 SPURIOUS EMISSIONS

The spurious emission for a Bluetooth receiver shall not be more than:

Frequency Band	Requirement
30 MHz - 1 GHz	-57 dBm
1 GHz – 12.75 GHz	-47 dBm

Table 4.3: Out-of-band spurious emission

The measured power should be measured in a 100 kHz bandwidth.

4.7 RECEIVER SIGNAL STRENGTH INDICATOR (OPTIONAL)

A transceiver that wishes to take part in a power-controlled link must be able to measure its own receiver signal strength and determine if the transmitter on the other side of the link should increase or decrease its output power level. A Receiver Signal Strength Indicator (RSSI) makes this possible.

The way the power control is specified is to have a golden receive power. This golden receive power is defined as a range with a low limit and a high limit. The RSSI must have a minimum dynamic range equal to this range. The RSSI must have an absolute accuracy of ±4dB or better when the receive signal power is –60 dBm. In addition, a minimum range of 20±6 dB must be covered, starting from –60 dB and up (see Figure 4.1 on page 26).

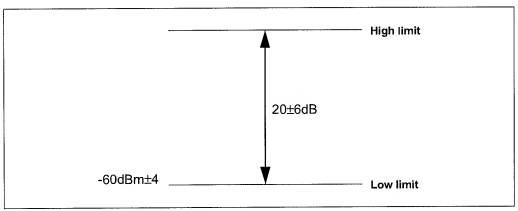


Figure 4.1: RSSI dynamic range and accuracy

4.8 REFERENCE INTERFERENCE-SIGNAL DEFINITION

A Bluetooth modulated interfering signal is defined as:

Modulation = GFSK

Modulation index = 0.32±1%

BT= 0.5±1%

Bit Rate = 1 Mbps ±1 ppm

Modulating Data = PRBS9

Frequency accuracy better than ±1 ppm.